AAEON®
Industrial Computing Platform Partner

TF-PFM-620S

Thermal Image Analysis Report

Report No: 07E090012

Issued by:	Rex Chang	/	*03/20/2007*
	Engineer		
Reviewed by:	Wenyuan Yang	/	*03/20/2007*
	Manager		

Thermal Analysis report

Test Date: 03-19~20-2007

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

Temperature Measurement:

1. 40 Channels Thermal Recorder:
   Manufacture : YOKOGAWA Inc. , LTD.
   Model : DA100-13-1D
   Date of Calibration : 12/11/06
   Serial Number : 12A323190

2. IR Thermal Camera:
   Manufacture : NIPPON AVIONICS CO., LTD.
   Model : TVS-100
   Date of Calibration : No calibration requirement

Test Configuration:

CPU : Onboard Intel ULV Celeron 650MHz / 400MHz
Memory : 256MB / Hynix HY57V56820CT-H (PC-133)
HDD : HITACHI HDS728080PLAT20 82.3GB
Power Supply : EMACS SP2-4300F
Software : Windows XP / Run Prime95
Test Time : After Power on 2 hours

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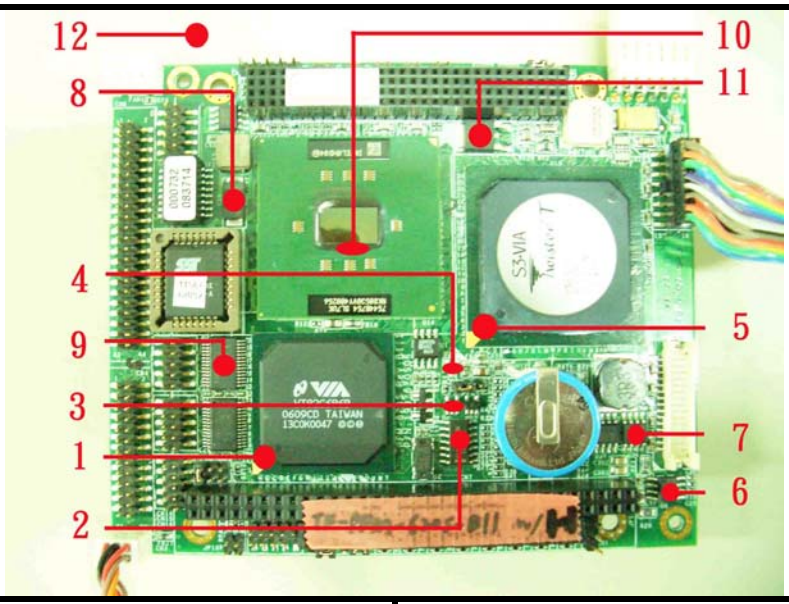
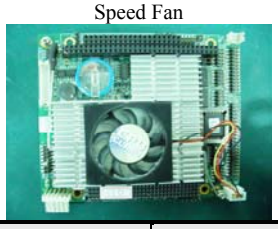
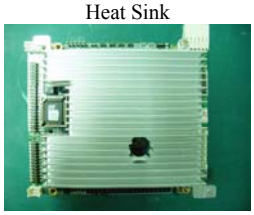
Component Side Measuring Result:

Thermal Couple Position	

	Sample # 1 Celeron M 650MHz + Heat Sink with High Speed Fan 	Sample # 2 Celeron M 400MHz + Heat Sink 

Point	Measured Location / Temp. Stage(℃)	Spec	25	60	25	50
1	U16- South Bridge.VIA.VT82C686BG	85	35.5	72.9	42.2	69.9
2	U13- TI.SN74LVC14ADR	155	36.5	73.9	52.8	80.5
3	U2- TI.SN74LVC1G07DBVR	115	36.7	74.1	51.8	79.5
4	D2-D Schottky .PHILIPH. BAT54 Series	150	37.3	74.7	53.6	81.3
5	U15-North ridge.VIA.VT8606G	85	36.6	74.0	55.1	82.8
6	U8- IR.IRU3037CSPbF	150	39.2	76.6	53.0	80.7
7	U37- MOSFET.APEC. AP4410GM	175	43.2	80.6	59.3	87.0
8	C19- TAIYO.LMK212BJ106KG	110	41.4	78.8	47.2	74.9
9	U29- INTERSIL.HIN213ECAZ	100	36.4	73.8	42.6	70.3
10	U14- INTEL.NK80530VY 400256SL7UK	125	39.8	77.2	55.7	83.4
11	Q2-Linear Regulator. AMS. AMS1085	150	54.9	92.3	67.7	95.4
12	The Ambient Temperature	N/A	22.6	60.0	22.3	50.0

The description in red states which temperature is over the specification of the device.

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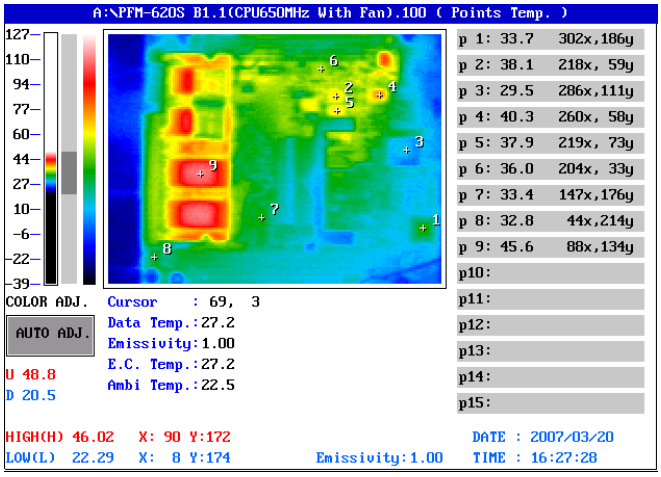
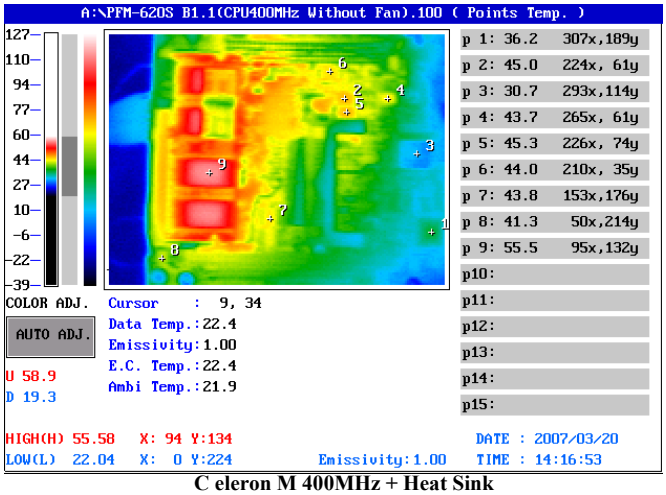
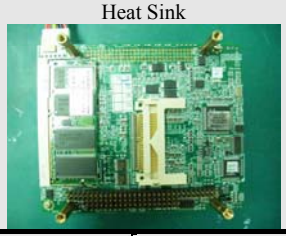
Solder Side Measuring Result:



Celeron M 650MHz + Heat Sink with High Speed Fan



C eleron M 400MHz + Heat Sink

			Sample # 1 Celeron M 650MHz + Heat Sink with High Speed Fan 		**Sample # 2** Celeron M 400MHz + Heat Sink 	
Point	**Temp. Stage(℃) / Measured Location**	**Spec**	**25**	**60**	**25**	**50**
1	U27- LATTICS. M4A3-64/32-10VNC	100	33.7	71.2	34.0	61.2
2	C17- Panasonic.EEF/ECG	105	38.1	75.6	41.4	68.6
3	U22- RELTEK. RTL8100BL-LF	100	29.5	67.0	30.3	57.5
4	U4- Intersil.ISL6520ACBZ	100	40.3	77.8	39.8	67.0
5	C18- Panasonic.EEF/ECG	105	37.9	75.4	41.3	68.5
6	C53- Panasonic.EEF/ECG	105	36.0	73.5	39.0	66.2
7	U17- Philips.74HCT245	125	33.4	70.9	34.3	61.5
8	Q8- MOSFET.VISHAY.SI9933BDY-T1-E3	125	32.8	70.3	33.7	60.9
9	Memory	85	45.6	83.1	47.1	74.3
10	Ambient Temperature	N/A	22.5	60.0	22.8	50.0
The description in red states which temperature is over the specification of the device.						

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